

I claim:

1. A composition comprising imidazoleacetic acid-ribotide (IAA-RP) and a pharmaceutically acceptable carrier.
2. A composition comprising imidazoleacetic acid-riboside (IAA-R) and a pharmaceutically acceptable carrier.
3. A composition comprising one or more congeners of imidazoleacetic acid-ribotide or imidazoleacetic acid-riboside and a pharmaceutically acceptable carrier.
4. A method of regulating the biological activity of an imidazoline receptor comprising contacting said receptor with imidazoleacetic acid-ribotide.
5. A method of regulating the biological activity of an imidazoline receptor comprising contacting said receptor with imidazoleacetic acid-riboside.
6. A method of regulating the biological activity of an imidazoline receptor comprising contacting said receptor with imidazoleacetic acid-ribotide or imidazoleacetic acid-riboside congener.
7. An antibody which is capable of binding to an imidazoleacetic acid-ribotide or an imidazoleacetic acid-riboside.

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- (b) determining whether the test compound decreases the level of imidazoline receptor activation as compared to those cells contacted with a vehicle control.

13. The method of claim 12, wherein activation of the imidazoline receptor is assayed by measuring the level of arachidonic acid release.

14. The method of claim 12, wherein activation of the imidazoline receptor is assayed by measuring the level of insulin secretion.

15. The method of claim 12, wherein the activation of the imidazoline receptor is assayed by measuring the activation of K⁺/ATP channels.

16. A method for identifying compounds that bind to an imidazoleacetic acid-ribotide or imidazoleacetic acid-riboside comprising:

- (a) preparing a reaction mixture comprising an imidazoleacetic acid-ribotide or imidazoleacetic acid-riboside and a test compound under conditions and for time sufficient to allow the components of the mixture to interact and bind;
- (b) identifying the bound test compound.